

**National Organic Standards Board  
Crops Subcommittee  
Petitioned Material Proposal - Ash from Manure Burning  
January 5, 2016**

**Summary of Proposed Action:**

EnergyWorks BioPower, LLC submitted a petition to revise 7 CFR 205.602(a), Ash from Manure Burning, to include the following annotation: “except where the combustion reaction does not involve the use of synthetic additives and is controlled to separate and preserve nutrients.” The petition states that EnergyWorks, “owns and operates a facility in PA that uses a staged thermochemical reactor to extract over 30 tons of minerals from 240 tons of egg-layer poultry manure each day.” The petitioner argues that annotation approval will provide the following benefits: will generate renewable electricity; will prevent excess nutrients in the environment; and will increase development of similar commercial processing facilities throughout the US.

Poultry manure is sourced from concentrated animal feeding operations (CAFOs), dried to normalize moisture content, conveyed to a thermochemical reactor, exposed to heat and oxygen to achieve proper conversion of organic material into combustible biogas (where the primary goal of the process is denitrification), and mineral ash is removed, cooled, tested and sold.

As referenced above, ash from manure burning is currently listed at §205.602 as a nonsynthetic substance prohibited for use in organic production. The petitioner claims that this “NOP prohibition was established because burning of manure was seen as being wasteful of nutrients.” They explain their petition rationale by 1) “suggest[ing] that extraction of minerals by controlled combustion preserves their non-synthetic nature”, 2) “while allowing organic growers to derive increased value from manure as a nutrient resource.”

The Subcommittee did not request a TR having determined not to add the annotation to the material listing; the continued blanket prohibition aligns with previous board recommendations. All prior board recommendations have supported the prohibition of ash from manure burning. At the fall 2015 NOSB meeting, the Board renewed the prohibition during the Sunset 2017 material reviews, stating, “ash from manure burning was placed on §205.602 based on its incompatibility with organic production; burning these materials is not an appropriate method to use to recycle organic wastes.”

The Crops Subcommittee has determined that the annotation amendment fails the OFPA criteria and should not be added to the National List.

**Evaluation Criteria (see attached checklist for criteria in each category)**

1. Impact on Humans and Environment
2. Essential & Availability Criteria
3. Compatibility & Consistency

**Criteria Satisfied?**

- |                              |  |                              |
|------------------------------|--|------------------------------|
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A |

**Substance Fails Criteria Category:** [3] **Comments:** Ash from manure burning was originally placed on §205.602 based on its incompatibility with organic production. Burning removes carbon and nitrogen from the final ash product and lessens its soil-building value. Utilizing burning as a method to recycle millions of pounds of excess poultry manure inadvertently supports the business of CAFOs by creating an organic industry demand for ash. Utilizing ash from manure burning in order to assist CAFOs in their

reduction of environmental and human health contamination is not a compelling argument for consideration for addition to the National List.

**Subcommittee Action & Vote**

Motion to annotate ash from manure burning at §205.602 - nonsynthetic substances prohibited for use in organic crop production - with the following annotation: “except where the combustion reaction does not involve the use of synthetic additives and is controlled to separate and preserve nutrients.”

Motion by: Carmela Beck  
 Seconded by: Colehour Bondera  
 Yes: 0 No: 5 Abstain: 0 Absent: 0 Recuse: 0

The motion failed, thus the Subcommittee supports retaining the existing prohibition of manure ash in organic crop production.

**Approved by Subcommittee Chair, Zea Sonnabend, to transmit to NOSB February 26, 2016**

**NOSB Evaluation Criteria for Substances Added To the National List - Crops**

**Category 1. Adverse impacts on humans or the environment? Ash from Manure Burning:**

Question	Yes	No	N/A	Comments/Documentation (TAP; petition; regulatory agency; other)
1. Is there a probability of environmental contamination during use or misuse? [§6518(m)(3)]	X			CAFOs contribute to environmental pollution and human health issues
2. Is there a probability of environmental contamination during, manufacture or disposal? [§6518(m)(3)]	X			
3. Are there any adverse impacts on biodiversity? (§205.200)	X			
4. Does the substance contain inerts classified by EPA as ‘inerts of toxicological concern’? [§6517 (c)(1)(B)(ii)]		X		
5. Is there potential for detrimental chemical interaction with other materials used in organic farming systems? [§6518(m)(1)]		X		
6. Is there a toxic or other adverse action of the material or its breakdown products? [§6518(m)(2)]		X		
7. Is there persistence or concentration of the material or breakdown products in the environment? [§6518(m)(2)]		X		

8. Would the use of the substance be harmful to human health or the environment? [§6517 (c)(1)(A)(i); §6517 (c)(2)(A)(i); §6518(m)(4)]		X		Provided 205.203 requirements are met.
9. Are there adverse biological and chemical interactions in the agro-ecosystem? [§6518(m)(5)]		X		
10. Are there detrimental physiological effects on soil organisms, crops, or livestock? [§6518(m)(5)]		X		

**Category 2. Is the Substance Essential for Organic Production?**

Question	Yes	No	N/A	Comments/Documentation (TAP; petition; regulatory agency; other)
1. Is the substance agricultural? [§6502(1)]	X			Egg-layer poultry manure
2. Is the substance formulated or manufactured by a chemical process? [§6502(21)]	X			Manufactured using a thermo-chemical reactor exposed to heat and oxygen to achieve proper conversion of organic material into combustible biogas (where the primary goal of the process is denitrification), mineral ash is removed, cooled, tested and sold.
3. Is the substance formulated or manufactured by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources? [§6502(21)]	X			
4. Is the substance created by naturally occurring biological processes? [§6502(21)]		X		
5. Is there a natural source of the substance? [§ 205.600(b)(1)]		X		
6. Is there an organic substitute? [§205.600(b)(1)]		X		
7. Is there a wholly natural substitute product? [§6517(c)(1)(A)(ii)]		X		
8. Are there any alternative substances? [§6518(m)(6)]	X			
9. Are there other practices that would make the substance unnecessary? [§6518(m)(6)]	X			

**Category 3. Is the substance compatible with organic production practices? Ash from Manure Burning:**

Question	Yes	No	N/A	Comments/Documentation (TAP; petition; regulatory agency; other)
1. Is the substance consistent with organic farming and handling? [§6517(c)(1)(A)(iii); 6517(c)(2)(A)(ii)]		X		Ash from manure burning is a by-product of the poultry factory farm industry, while we support the need to find creative solutions to prevent environmental pollution and public health concerns due to the build-up of excess manure accumulation, we don't support the industry creating the need.
2. Is the substance compatible with a system of sustainable agriculture? [§6518(m)(7)]		X		See above.
3. If used in livestock feed or pet food, is the nutritional quality of the food maintained with the substance? [§205.600(b)(3)]			X	
4. If used in livestock feed or pet food, is the primary use as a preservative? [§205.600(b)(4)]			X	
5. If used in livestock feed or pet food, is the primary use to recreate or improve flavors, colors, textures, or nutritive value lost in processing (except when required by law)? [§205.600(b)(4)]			X	
6. Is the substance used in production, and does it contain an active synthetic ingredient in the following categories: [§6517(c)(1)(B)(i);  copper and sulfur compounds		X		
toxins derived from bacteria		X		
pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals		X		
livestock parasiticides and medicines		X		
production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleansers		X		